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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/192,766	11/16/1998	JOHN F. BREEDIS	101.931	1189

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WIGGIN & DANA
ONE CENTURY TOWER
NEW HAVEN, CT 06508-1832

EXAMINER

IP, SIKYIN

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/192,766

Applicant(s)

BREEDIS ET AL.

Examiner

Sikyin Ip

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,7,9,11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,7,9,11 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 7, 9, and 11-12 are rejected under 35 U.S.C. § 103 as being unpatentable over JP 5-311292 (PTO-1449, abstract and Table 1, sample No. 13 and 14) in view of acknowledged prior art admission in page 14, lines 332-338.

JP 5311292 discloses the features including the claimed Cu base alloy compositions and Ni/P ratio (see abstract and col. 7, sample No. 13 and 14), and the intended electrical use ([0028]) except for the electrical conductivity and the O, S, and/or C content.

With respect to the electrical conductivity, that the instant copper based alloy composition, intended use, and Ni/P ratio are overlapped by the cited JP 5311292; consequently, the properties as recited in the instant claims would have inherently possessed by the teachings of the cited references. Therefore, the burden is on the

applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product. Similar process can reasonably be expected to yield products which inherently possess the same properties. In re Spade, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990), In re DeBlauwe, 222 USPQ 191, and In re Wiegand, 86 USPQ 155 (CCPA 1950). In re Best, 195 USPQ, 430 and MPEP § 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 195 USPQ 430, 433 (CCPA 1977)."

Acknowledged prior art admission in page 14 of instant specification discloses that the claimed O, S, and/or C content is typical elements found in brass scrap, remelted copper, or electrolytic copper which is a typical source of material for making electrical conductive Cu alloy products. Thus, ordinary skill artisan would recognize elements such as O, S, and/or C would typically exist in the Cu alloy products of cited references.

The expression "sufficient resistance to stress relaxation" in claim 1, last 3 lines is defined in relative terms which read on a minimal amount of remaining stress that requires prior art's electrical connectors to be functional such as remain connected. As is evinced by the working condition of a heat exchanger, which is normally operating at

high temperatures for years of service life (JP 5311292 abstract). The same material for heat exchanger can be used for electrical and electronic parts (see JP 5311292 [0028]).³

Claims 1, 3, 7, and 9 are rejected under 35 U.S.C. § 103 as being unpatentable over JP 05059467 (abstract).

Claims 1, 3, 7, 9, and 11-12 are rejected under 35 U.S.C. § 103 as being unpatentable over JP 06179932 (abstract).

JP 05059467 (translation page 14, col. 6, from right of Table 2) or JP 06179932 (translation page 9, first col. From right of Table 1) discloses the features including the claimed Cu base alloy compositions, electrical connector use (abstract), and electrical conductivity except for the Ni/P ratio.

With respect to the Ni/P ratio that it is well settled that there is no invention in the discovery of a general formula if it covers a composition described in the prior art, In re Cooper and Foley 1943 C.D. 357, 553 O.G. 177; 57 USPQ 117, Taklatwalla v. Marburg, 620 O.G. 685, 1949 C.D. 77, and In re Pilling, 403 O.G. 513, 44 F(2) 878, 1931 C.D. 75. In the absence of evidence to the contrary, the selection of the proportions of elements would appear to require no more than routine investigation by those ordinary skilled in the art. In re Austin, et al., 149 USPQ 685, 688.

The expression "sufficient resistance to stress relaxation" in claim 1, last 3 lines is defined in relative terms which read on a minimal amount of remaining stress that requires prior arts' electrical connectors to be functional such as remain connected.

Claims 1, 3, 7, 9, and 11-12 are further rejected under 35 U.S.C. 103(a) as being

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unpatentable over JP 06179932 as applied to claims above, and further in view of JP 5-311292 (PTO-1449, abstract and Table 1, sample No. 13 and 14).

JP 06179932 in abstract (alloy composition) and Table 1 (electrical conductivity) discloses the features substantially as claimed as set forth in the rejection above except for the Ni/P ratio. However, JP 5-311292 in [0017] teaches Ni/P range of 5-50 improves strength, durability, heat resistance, and stress-related and cracking resistance in the same field of endeavor or the analogous metallurgical art. Therefore, it would have been obvious to one having ordinary skill in the art of the cited references at the time the invention was made to adjust the Ni/P ratio as taught by JP 5-311292 in order to improve strength, durability, heat resistance, and stress-related and cracking resistance in (See translated copy, page 9, [0017]). In re Venner, 120 USPQ 193 (CCPA 1958), In re LaVerne, et al., 108 USPQ 335, and In re Aller, et al., 105 USPQ 233.

Response to Argument

Applicant's arguments filed August 25, 2004 have been fully considered but they are not persuasive.

Applicants argue that the Figure 1 and page 8, lines 207-210 in instant specification have shown the claimed Ni/P ratio is critical. But, Figure 1 fails to express Ni/P ratio to any claimed properties. Figure 1 fails to show properties at the end-points of claimed Ni/P ratios. Furthermore, compositions in Figure 1 do not contain Zn which is required by instant claims.

Applicants' argument in page 6, first full paragraph is noted. But, applicants fail to provide factual evidence to support their position that the claimed Ni/P ratio is critical.

Applicants argue that JP 05311292 broadly teaches Ni/P ratio from 5:1 to 50:1. But, said reference has disclosed Ni/P ratios in col. 5, samples No. 13 and 14 with Ni/P ratios at 5.4 and 7.4 respectively.

Applicants' argument as set forth in page 6 of the instant remarks is noted. But, alloy 13 of JP 05311292 reference has shown the claimed Ni/P ratio is not critical and does not provide unexpected properties by itself. And there is no evidence found on record to substantiate applicants' position.

Applicants argue that JP 05311292 teaches away from claimed Ni/P ratio of 3.5 to 7.5. But, it is clear that the claimed 5 to 7.5 Ni/P ratios are anticipated by JP 05311292 (see examples 13 and 14 in Table 1). Moreover, it is well settled that the teaching of a reference is not limited to preferred embodiments. All disclosures of prior art, including unpreferred embodiments, must be considered in determining obviousness. See *In re Boe*, 148 USPQ 507, 510 (CCPA 1966), *Ex parte Thumm* 132 USPQ 66, 68, and *In re Siebentritt*, 152 USPQ 618. Moreover, under 35 USC § 103, a reference must be considered not only for what it expressly teaches, but also for what it fairly suggests. *In re Lamberti*, 545 F.2d 747, 192 USPQ 278, 280 (CCPA 1976); *In re Simon*, 59 CCPA 1140, 461 F.2d 1387, 174 USPQ 114 (1972); and *In re Mills*, 470 F.2d 649, 176 USPQ 196 (CCPA 1972). *Ultradent Prods., Inc. v. Life-Like Cosmetics, Inc.*, 127 F.3d 1065, 1068, 44 USPQ2d 1336, 1339 (Fed. Cir. 1997) (error to construe prior art disclosure as limited to the preferred embodiment).

Applicants' argument from paragraph bridging pages 6-7 to second full paragraph in page 7 of instant remarks is noted. But applicants fail to substantiate their

position that the claimed electrical conductivity would not be inherently possessed by the composition of JP 05311292.

Applicants argue that JP 05311292 does not disclose the intended use. First, applicants' attention is directed to end of paragraph [0028] that material said reference can be used for electrical and electronic parts as known in the art of cited reference. Second, claimed intended use of the claimed alloy does not lend patentability to the alloy. A mere statement of a new use for an otherwise old or obvious composition cannot render a claim to the composition patentable. See *In re Lemin*, 51 CCPA 942, 326 F.2d 437, 140 USPQ 273 (1964), *Kropa v. Robie, Mahlman*, 88 USPQ 478 (CCPA 1951), *Ex parte Douros* 163 USPQ 667 (POBA), *In re Casey*, 152 USPQ 235 (CCPA 1967), and *In re Craige*, 188 F2d 505, 89 USPQ 393 (CCPA 1951).

Applicants argue that JP 05059467, JP 6-179932, and JP 6-228684 do not disclose the claimed Ni/P ratio. However, said references have Ni and P contents overlapped the claimed range. Furthermore, selecting a range in a known range by optimization for the best results is within ambit of ordinary skill artisan, see *In re Aller*, et al., 105 USPQ 233 and *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). Moreover, as are evident by JP5311292 samples No. 13 and 14 that the claimed Ni/P has no unexpected results. With respect to the intended use argument, the examiner reiterates the response as set forth above.

Applicants argue that Zn is not an essential alloying element in JP 5-059467. But, Zn has been taught by said reference. Under 35 USC § 103, a reference must be considered not only for what it expressly teaches, but also for what it fairly suggests. In

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re Lamberti, 545 F.2d 747, 192 USPQ 278, 280 (CCPA 1976); In re Simon, 59 CCPA 1140, 461 F.2d 1387, 174 USPQ 114 (1972); and In re Mills, 470 F.2d 649, 176 USPQ 196 (CCPA 1972). Ultradent Prods., Inc. v. Life-Like Cosmetics, Inc., 127 F.3d 1065, 1068, 44 USPQ2d 1336, 1339 (Fed. Cir. 1997) (error to construe prior art disclosure as limited to the preferred embodiment).

Applicants' argument as set forth with respect to JP06-179932 is noted. But, the examiner reiterates the responses as set forth above.

Applicants' statement in page 10, first full paragraph of instant remarks is noted. Said functional limitation has been fully considered and met by cited references. The recited functional limitation is defined in relative terms "sufficient resistance to stress relaxation" in claim 1, last 3 lines which read on a minimal amount of remaining stress that requires electrical connectors to be functional such as remain contact. As is evinced by the working condition of a heat exchanger, which is normally operating at high temperatures for years of service life (JP 5311292 abstract). The same material for heat exchanger can be used for electrical and electronic parts (see JP 5311292 [0028]).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (571)-272-1244.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SIKYIN IP
PRIMARY EXAMINER
ART UNIT 1742

S. Ip
November 14, 2004